

IN THE CLAIMS:

Please amend the claims as follows:

1. (Canceled)
2. (Currently Amended) Method according to ~~claim 1~~ claim 3, wherein said matched filter multiplies said samples ~~(21)~~ of said received signal elementwise with samples ~~(22)~~ of said replica sequence.
3. (Currently Amended) Method for determining a correlation phase between a signal received from a satellite at a receiver and an available replica sequence comprising  
using a matched filter to check various correlation phases, said matched filter  
multiplying samples of said received signal with samples of said replica sequence and  
summing the resulting products to obtain a correlation value for a specific correlation phase, said method further comprising  
shifting samples of said received signal and of said available replica sequence relative to each other for each correlation phase which is checked, and  
using results obtained in the calculations for one correlation phase by said matched filter for calculating a subsequent correlation phase, and  
determining a current position of said receiver,  
~~Method according to claim 1, wherein said received signal comprises a binary sequence.~~  
wherein possible values of said binary sequence are +1 and -1,  
wherein  $C_j$  constitutes a determined correlation value for an  $i^{\text{th}}$  checked correlation phase, wherein N is a length of said binary sequence,  
wherein  $x_{j+i}$  constitutes a  $j^{\text{th}}$  sample of said received signal for said  $i^{\text{th}}$  correlation phase, wherein the samples of said replica sequence are not shifted

for different correlation phases which are to be checked, wherein  $r_j$  constitutes a  $j^{\text{th}}$  sample of said replica sequence, wherein a set  $J_+$  comprises the indices  $j$  for which  $(r_j = 1 \ \& \ r_{j-1} = 1)$  OR  $(r_j = -1 \ \& \ r_{j-1} = -1)$ ,  
and wherein a correlation value  $C_{i+1}$  for the  $(i+1)^{\text{th}}$  correlation phase is calculated as:

$$C_{i+1} = -C_i - r_0 x_i + r_{N-1} x_{i+N} + \sum_{j \in J_+} 2 * r_j x_{j+i}$$

4. (Canceled)
5. (Canceled)
6. (Currently Amended) Method according to claim 4 Method for determining a correlation phase between a signal received from a satellite at a receiver and an available replica sequence comprising
  - using a matched filter to check various correlation phases, said matched filter
  - multiplying samples of said received signal with samples of said replica sequence and
  - summing the resulting products to obtain a correlation value for a specific correlation phase, said method further comprising
  - shifting samples of said received signal and of said available replica sequence relative to each other for each correlation phase which is checked, and
  - using results obtained in the calculations for one correlation phase by said matched filter for calculating a subsequent correlation phase, and
  - determining a current position of said receiver,
  - wherein said received signal comprises a binary sequence,
  - wherein possible values of said binary sequence are +1 and -1,
  - wherein  $C_i$  constitutes the determined correlation value for an  $i^{\text{th}}$  checked correlation phase  $i$ , wherein  $N$  is the length of said binary sequence, wherein  $x_{j+i}$  constitutes a  $j^{\text{th}}$  sample of said received signal for said  $i^{\text{th}}$

correlation phase, wherein the samples (22) of said replica sequence are not shifted for the different correlation phases which are to be checked, wherein  $r_j$  constitutes a  $j^{\text{th}}$  samples of a said replica sequence, wherein a set  $J_-$  comprises the indices  $j$  for which  $(r_j = 1 \ \& \ r_{j-1} = -1)$  OR  $(r_j = -1 \ \& \ r_{j-1} = 1)$ , and wherein a correlation value  $C_{i+1}$  for the  $(i+1)^{\text{th}}$  correlation phase is calculated as:

$$C_{i+1} = C_i - r_0 x_i + r_{N-1} x_{i+N} - \sum_{j \in J_-} 2^* r_j x_{j+i}.$$

7. ~~(Currently Amended)–Method according to claim~~ Method for determining a correlation phase between a signal received from a satellite at a receiver and an available replica sequence comprising

using a matched filter to check various correlation phases, said matched filter

multiplying samples of said received signal with samples of said replica sequence and

summing the resulting products to obtain a correlation value for a specific correlation phase, said method further comprising

shifting samples of said received signal and of said available replica sequence relative to each other for each correlation phase which is checked, and

using results obtained in the calculations for one correlation phase by said matched filter for calculating a subsequent correlation phase, and

determining a current position of said receiver,

wherein said received signal comprises a binary sequence,

wherein possible values of said binary sequence are +1 and -1,4,

wherein  $C_i$  constitutes a determined correlation value for an  $i^{\text{th}}$  checked correlation phase, wherein  $N$  is the length of said binary sequence, wherein  $x_{j+i}$  constitutes a  $j^{\text{th}}$  sample of said received signal for said  $i^{\text{th}}$  correlation phase, wherein the samples (22) of said replica sequence are not shifted for the different correlation phases which are to be checked, wherein  $r_j$  constitutes a  $j^{\text{th}}$  sample of said replica sequence, wherein a set  $J_+$  comprises the indices  $j$  for

which  $(r_j = 1 \ \& \ r_{j-1} = 1)$  OR  $(r_j = -1 \ \& \ r_{j-1} = -1)$ ,

wherein a set J. comprises the indices j for which

$(r_j = 1 \ \& \ r_{j-1} = -1)$  OR  $(r_j = -1 \ \& \ r_{j-1} = 1)$ ,

and wherein a correlation value  $C_{i+1}$  for the  $(i+1)^{\text{th}}$  correlation phase is calculated as:

$$C_{i+1} = -C_i - r_0 x_i + r_{N-1} x_{i+N} + \sum_{j \in J_+} 2 * r_j x_{j+i},$$

if the size of said set J. is larger than the size of said set  $J_+$ , and as:

$$C_{i+1} = C_i - r_0 x_i + r_{N-1} x_{i+N} - \sum_{j \in J_-} 2 * r_j x_{j+i},$$

if the size of said set  $J_+$  is larger than the size of said set  $J_-$ .

8. (Original) Method according to claim 1, further comprising a subsequent coherent and/or noncoherent processing for handling signals of low strength.
9. (Original) Method according to claim 1, wherein said received signal is a code modulated signal, and wherein said replica sequence is a replica code sequence.
10. (Original) Method according to claim 9, wherein said code modulation of said received code modulated signal is a Code Division Multiple Access (CDMA) spread spectrum modulation.
11. (Original) Use of a method according to claim 1 in a process for acquisition and/or tracking of signals received at a receiver.
12. (Currently Amended) Receiver comprising  
receiving means for receiving signals; and  
processing means for carrying out the method according to ~~claim 1~~  
claim 3.

13. (Original) Receiver according to claim 12, which receiver is a receiver of a positioning system.
14. (Original) Electronic device comprising a receiver according to claim 12.
15. (Original) Electronic device according to claim 14, wherein said electronic device is a mobile terminal capable of communicating with a communication network.
16. (Currently Amended) Device comprising  
means for receiving from a receiver information on signals received  
by said receiver; and  
processing means for carrying out the method according to ~~claim 1~~  
claim 3.
17. (Original) Device according to claim 16, which device is a network element of a network.
18. (Original) System comprising  
a receiver comprising means for receiving signals, and means for  
providing information on received signals; and  
a device according to claim 16.
19. (Original) System comprising  
a receiver according to claim 12; and  
a device for providing assistance data to said receiver.
20. (Original) System according to claim 19, wherein said device is a network element of a network.
21. (Original) System according to claim 19, wherein said system is a positioning system.

22. (Original) System according to claim 18, wherein said system is a positioning system.